

To: Deschambault, Lynda[Deschambault.Lynda@epa.gov]
Cc: DCarey@waterboards.ca.gov[DCarey@waterboards.ca.gov]; Chris Stetler (chris.stetler@waterboards.ca.gov)[chris.stetler@waterboards.ca.gov]; Greg Reller[gr@burlesonconsulting.com]; Brown, Anthony R (RM)[anthony.brown@bp.com]; Cohen, Adam[Adam.Cohen@dgsllaw.com]; Ferguson, Scott@Waterboards[scott.ferguson@waterboards.ca.gov]; Grant Ohland - (gohland@ohlandhydrogeo.com)[gohland@ohlandhydrogeo.com]
From: Lombardi, Marc
Sent: Fri 8/4/2017 11:19:46 PM
Subject: RE: Leviathan Mine - Hazardous Conditions Response Plan – Crusher Road Slope Instability - Lifting of Exclusion Zone Requirements for AR Workforce
[20170804_075125.jpg](#)

Lynda,

The purpose of this email is to notify the U.S. EPA that we have lifted the exclusion zone requirements that were put in place by Atlantic Richfield for our workforce in response to the Crusher Road slope instability at the Leviathan Mine. The exclusion zone requirements were detailed in Atlantic Richfield's *Hazardous Conditions Response Plan – Crusher Road Slope Instability Memo*, dated May 3, 2017.

Based on the current state of the slope repair being conducted by the Lahontan Regional Water Quality Control Board (LRWQCB), the ongoing survey monitoring data which has shown no further movement, and the visual observations which indicate that no appreciable slope movement has occurred since approximately June 9, 2017, Atlantic Richfield has lifted the Hazardous Conditions Exclusion Zone requirements associated with the Crusher Slope Instability and we have re-opened the affected section of road by Pond 4 to Atlantic Richfield traffic effective August 4, 2017.

The LRWQCB's contractor has made considerable progress on the slope repair. As of this morning, the construction at the toe of the slump appears substantially complete, including construction of the subdrains, rip-rap, and the road base section along the access road (see attached picture). According to the LRWQCB, remaining construction includes placement of rip-rap on the upper portion of the slope, excavation and backfilling of the tension cracks at the top of the slope and placement of the HDPE liner along the backside of the Crusher Road. As indicated, the survey data indicates no additional movement to date, and the water levels have decreased over ten feet in the wells upslope of the failure area. In addition to lifting the exclusion zone requirement, we are also reducing the slope survey monitoring frequency from three- to two-times per week until the LRWQCB completes their construction. We will continue to provide the LRWQCB with the results of the monitoring as they are received.

Should you have any questions or comments please contact Tony Brown at (657) 529-4537 or anthony.brown@bp.com.

Thanks,

Marc

Marc R. Lombardi, CEM, PG

Principal Geologist / Office Manager, Environment & Infrastructure Americas, Amec Foster Wheeler

10940 White Rock Road, Suite 190, Rancho Cordova, CA 95670, USA

D (916) 853-8903 M (916) 302-6326

marc.lombardi@amecfw.com amecfw.com



From: Lombardi, Marc

Sent: Wednesday, May 03, 2017 2:02 PM

To: Lynda Deschambault (deschambault.lynda@epa.gov) <deschambault.lynda@epa.gov>

Cc: DCarey@waterboards.ca.gov; Chris Stetler (chris.stetler@waterboards.ca.gov)

<chris.stetler@waterboards.ca.gov>; Greg Reller <gr@burlesonconsulting.com>; Brown,

Anthony R (RM) <anthony.brown@bp.com>; Cohen, Adam <Adam.Cohen@dgsllaw.com>

Subject: FW: Leviathan Mine - Hazardous Conditions Response Plan – Crusher Road Slope Instability

Importance: High

Lynda,

Attached for your information is the Hazardous Condition Response Plan (Response Plan) that Atlantic Richfield has implemented for its workforce at the Leviathan Mine Site

in response to the Crusher Road Slope Instability. The Response Plan identifies measures to moderate the potential risks to site personnel while the described hazardous conditions persist. Implementation of this Response Plan is not materially affecting HDS plant spring commissioning and RI field work at this time, although progress on construction of the Upper Ponds Conveyance System will continue to be temporarily delayed until the California access road is cleared. HDS operations could be impacted if there is additional slope movement or other changed conditions. Atlantic Richfield is also preparing a slope movement monitoring plan, which will be forwarded to you once it is ready. We will coordinate with the Water Board before installing any monitoring points on the slope above Pond 4. Monitoring results will be evaluated to ensure the continued protection of site personnel.

If you have any questions please contact Tony Brown at (657) 529-4537 or anthony.brown@bp.com.

Thanks,

Marc

Marc R. Lombardi, CEM, PG

Principal Geologist / Office Manager, Environment & Infrastructure Americas, Amec Foster Wheeler

10940 White Rock Road, Suite 190, Rancho Cordova, CA 95670, USA

D (916) 853-8903 M (916) 302-6326

marc.lombardi@amecfw.com amecfw.com



From: Lombardi, Marc

Sent: Wednesday, May 03, 2017 1:03 PM

To: Brown, Anthony R (RM) <anthony.brown@bp.com>; 'phil thompson' <philthompson705@gmail.com>; Trynor, Mike <Mike.Trynor@amecfw.com>; David Hoffman <dhoffman@broadbentinc.com>; Holli Merchant (hmerchant@ehsdocuments.com)

<hmerchant@ehsdocuments.com>; Mike Johnson <Mike.Johnson@copperenv.com>;
'jboucher@broadbentinc.com' <jboucher@broadbentinc.com>; 'Dave McCarthy'
<dave.mccarthy@copperenv.com>; 'rmiller@broadbentinc.com' <rmiller@broadbentinc.com>;
'timw@srco.com' <timw@srco.com>; Steve Grice <SGrice@usaenviro.com>; 'Michelle Souza'
<MSouza@broadbentinc.com>

Cc: Huddleston, Loren <loren.huddleston@amecfw.com>; Huddleston, Jesica
<jesica.huddleston@amecfw.com>; Jefferson, Jill <Jill.Jefferson@amecfw.com>; Gonzales,
Joseph D <Joseph.Gonzales@amecfw.com>; Brantley, Katy <katy.brantley@amecfw.com>;
Nommensen, Roger <roger.nommensen@amecfw.com>; Harden, Maia
<Maia.Harden@amecfw.com>; Klein, Joshua <Joshua.Klein@amecfw.com>; Davenport, Grant
<Grant.Davenport@amecfw.com>; Parrish, Kent <Kent.Parrish@amecfw.com>; Morley, Matt
<Matt.Morley@amecfw.com>; Lambeth, Gregory <Gregory.Lambeth@amecfw.com>; Stelman,
Ken <Kenneth.Stelman@amecfw.com>; Haderlie, Brian <Brian.Haderlie@amecfw.com>;
Johnson, Bryce <bryce.johnson@amecfw.com>; Deutsch, Paul <Paul.Deutsch@amecfw.com>;
Berlinghieri, Annie <Annie.Berlinghieri@amecfw.com>; Andrews, Andy
<Andy.Andrews@amecfw.com>; Fassio, Joe <Joe.Fassio@amecfw.com>; Velasquez, Steve
<Steve.Velasquez@amecfw.com>; Starr, Robert <Robert.Starr@amecfw.com>; Swigonski, Don
<Don.Swigonski@amecfw.com>; Frey, Chuck <chuck.frey@amecfw.com>; Wuerch, Jason
<jason.wuerch@amecfw.com>; Jones, Britt <Britt.Jones@amecfw.com>;
'andy.slavik@copperenv.com' <andy.slavik@copperenv.com>; Bryan Vetrano
<bvetrano@broadbentinc.com>; 'Abby Cazier' <abby.cazier@copperenv.com>; Aaron
Sonerholm <psonerholm@broadbentinc.com>; Brian Erickson <berickson@broadbentinc.com>;
Nathan Peetz <npeetz@broadbentinc.com>; 'Denny Doyal (denny.doyal@gmail.com)'
<denny.doyal@gmail.com>; Joe Fusano <j oefusano@yahoo.com>; Steve Phillips
<StevePhillips@srco.com>; 'Cohen, Adam' <Adam.Cohen@dgslaw.com>

Subject: Leviathan Mine - Hazardous Conditions Response Plan – Crusher Road Slope
Instability

Importance: High

Team,

Attached is a Hazardous Conditions Response Plan for the recent Crusher Road Slope
Instability. Please cascade to all applicable Leviathan Mine personnel and
subcontractors. All site personnel should be familiarized with and follow this plan until
further notice.

Please contact Tony Brown or myself with any questions.

Thanks,

Marc

Marc R. Lombardi, CEM, PG

Principal Geologist / Office Manager, Environment & Infrastructure Americas, Amec Foster Wheeler

10940 White Rock Road, Suite 190, Rancho Cordova, CA 95670, USA

D (916) 853-8903 M (916) 302-6326

marc.lombardi@amecfw.com amecfw.com



This message is the property of Amec Foster Wheeler plc and/or its subsidiaries and/or affiliates and is intended only for the named recipient(s). Its contents (including any attachments) may be confidential, legally privileged or otherwise protected from disclosure by law. Unauthorised use, copying, distribution or disclosure of any of it may be unlawful and is strictly prohibited. We assume no responsibility to persons other than the intended named recipient(s) and do not accept liability for any errors or omissions which are a result of email transmission. If you have received this message in error, please notify us immediately by reply email to the sender and confirm that the original message and any attachments and copies have been destroyed and deleted from your system. If you do not wish to receive future unsolicited commercial electronic messages from us, **please forward this email to: unsubscribe@amecfw.com and include "Unsubscribe" in the subject line.** If applicable, you will continue to receive invoices, project communications and similar factual, non-commercial electronic communications.

Please click <http://amecfw.com/email-disclaimer> for notices and company information in relation to emails originating in the UK, Italy or France.